

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

RECEIVED
CENTRAL FAX CENTER
DEC 28 2006

REMARKS/ARGUMENTS

Claims 1-27 are pending in the present application.

This Amendment is in response to the Office Action mailed October 19, 2006. In the Office Action, the Examiner rejected claims 19-27 under 35 U.S.C. §101; claims 1-27 under 35 U.S.C. §103(a). Applicants have amended claim 19. Reconsideration in light of the remarks made herein is respectfully requested.

Response to the Examiner's arguments

1. In the Office Action, the Examiner contends that verification of the flash memory area is verification of the initiation modules of the BIOS (Office Action, page 13, lines 4-7). Applicants respectfully disagree for the following reasons.

First, as discussed below, Christeson does not disclose verification of the flash memory. Christeson merely discloses verification of the flash memory area. (Emphasis added.) An area is an address space that stores a device. Christeson teaches that verification of the flash memory area so that the area may be updated to include the normal system BIOS area, a user reserved area, a LAN BIOS area, a SCSI BIOS area, a video data area, or any other application specific processing logic in an area of flash memory (Christeson, col. 3, lines 28-35).

Second, verification does not mean "automatically evaluating". Christeson specifically teaches that when executing out of normal BIOS, the dynamic update program displays a menu of options for user selection" (Christeson, col. 3, lines 26-27). Requiring the user to select an option through a menu is not an automatic operation.

Third, verification means "to prove the truth of", not evaluating. In contrast, evaluating is an act of determining if the initiation module is required for the recovery. (See, for example, specification, paragraph [0021]). The Examiner contends that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims, citing In re Van Guens, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicants respectfully disagree and submit that the Examiner mis-reads Van Guens. In Van Guens, the claim in question recites a magnet assembly with a "uniform magnetic field". The board found that the Japanese reference disclosed a magnetic assembly with a substantially uniform magnetic field, varying no more than 10 percent. Van Guens does not disagree with this finding. Instead, Van

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

Guens argues that the uniform magnetic field limitation in the claim in question must be interpreted in light of the specification and the understanding of persons skilled in the NMR and MRI art. Van Guens then contends that the Japanese reference does not make the invention of the claim in question obvious because it does not teach the level of magnetic field uniformity required for NMR imaging. The court rejects this argument and states that the claim is not expressly limited to NMR or MRI apparatus. The court then holds that Van Guens cannot read an NMR limitation into the claim to justify his argument as to the meaning of the "uniform magnetic field." The Van Guens court, therefore, applies the rule that limitations from the specification are not read into the claims only when there is no dispute that the prior art discloses the claimed invention and the limitation provides further specificity to the claim in an attempt to distinguish from the prior art. In the present application, no limitation from the specification is read into the claim. The specification is used only to interpret the claim language to distinguish from the prior art. Applicant submits that the prior art reference does not disclose, either implicitly or explicitly, suggest, or render obvious the claimed invention.

2. In the Office Action, the Examiner contends that "[b]y placing the update in the recovery BIOS as opposed to placing the update in the normal BIOS is "designated" the new initiation module as a recovery initiation module since it is required for recovery (Office Action, page 13, lines 20-22). Applicants respectfully disagree for the following reasons.

First, the entire recovery BIOS is not the same as a recovery initiation module. Even if assuming placing the update in the recovery BIOS is designating the update as recovery BIOS, this "designation" applies to the entire update, not to a recovery initiation module. A BIOS may contain recovery modules and non-recovery modules.

Second, placing is merely an act of putting a device into an area, whereas designating is to give a name to, to specify, to label, to point to. Without a specific naming, a mere placing a device in an area cannot render the device to be characterized as a recovery initiation module.

Rejection Under 35 U.S.C. § 101

In the Office Action, the Examiner rejected claims 19-27 under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. The Examiner indicated that the claim is directed towards and "an apparatus" composed of "a BIOS firmware" and "a

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

firmware update utility". This is a program pro se and is non-statutory subject matter.
Applicants have amended claim 19.

Accordingly, Applicants respectfully request the rejections under 35 U.S.C. §101 be withdrawn.

Rejection Under 35 U.S.C. § 103

In the Office Action, the Examiner rejected claims 1-27 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,579,522 issued to Christeson et al. ("Christeson") in view of U.S. Patent No. 6,732,267 issued to Wu et al. ("Wu"). Applicants respectfully traverse the rejection and submit that the Examiner has not met the burden of establishing a *prima facie* case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP* §2143, p. 2100-129 (8th Ed., Rev. 2, May 2004). Applicants respectfully submit that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Christeson discloses a dynamic non-volatile memory update in a computer system. A flash memory device contains a normal system BIOS 201 and a recovery BIOS 202 used for recovery operation (Christeson, col. 5, lines 36-40; lines 44-46). To prevent an aborted BIOS update from rendering the computer non-functional, there are two update modes: a normal update mode and a recovery update mode (Christeson, col. 6, lines 8-12). Recovery update mode is used when a user cannot boot the system because the normal system BIOS has been corrupted following a power failure during a normal BIOS update (Christeson, col. 6, lines 27-30). A jumper is used to modify the address to configure the system to either a normal BIOS map or a recovery BIOS map (Christeson, col. 7, lines 8-15).

Wu discloses a system and method for performing remote BIOS updates. A target system 102 includes a CPU 132 containing a system BIOS 134 in non-volatile memory, system

Appl. No. 09/943,904

Amdt. dated December 28, 2006

Reply to Office Action of October 19, 2006

memory 142, and one or more writable non-volatile storage devices 130 (Wu, col. 3, lines 33-39). The storage device contains a partition 138 which is an Extensible Firmware Interface (EFI) partition (Wu, col. 3, lines 33-39). The EFI partition is dedicated to the booting environment, and stores OS loaders. It may also be used to store code and files supporting remote BIOS updating (Wu, col. 3, lines 48-52).

Christeson and Wu, taken alone or in any combination, do not disclose, suggest, or render obvious, at least one of (1) adding a new initiation module to a BIOS firmware of a computing system having an extensible firmware architecture, the BIOS firmware having a plurality of initiation modules including recovery initiation modules for recovery of the computing system and non-recovery modules, (2) automatically evaluating the initiation module; and (3) designating the new initiation module as a recovery initiation module if the new initiation module is required for the recovery of the computing system.

First, Christeson merely discloses recovery BIOS which is used for recovery operations (Christeson, col. 2, lines 52-54), not a BIOS firmware having recovery and non-recovery modules and not initialization modules. The recovery BIOS is used in a recovery update mode when a user cannot boot the system because the normal system BIOS has been corrupted (Christeson, col. 2, lines 52-54). The recovery BIOS is a subset of the normal BIOS (Christeson, col. 8, lines 25-27). In contrast, the claimed invention recites a BIOS firmware having recovery and non-recovery modules. Furthermore, a new initiation module is a new module to be added to a BIOS firmware, not just a subset of the old BIOS.

Second, Christeson merely discloses two update modes, not adding a new initiation module. The recovery BIOS 202 is fixed (e.g., occupying fixed address range and having a size of 8K as shown in Figure 2 of Christeson) and is used to provide the recovery BIOS update mode. There is no new initiation module to be added to the BIOS firmware. Since the BIOS firmware contained in the flash memory is fixed, occupying a fixed address range and having a fixed size (Christeson, Figure 2), it does not have an extensible firmware architecture.

Since Christeson only teaches a fixed address range and a fixed size, Christeson does not suggest using an extensible firmware architecture. Accordingly, a combination of Christeson with Wu is improper.

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

Furthermore, Wu merely discloses an EFI partition dedicated to the booting and stores OS loaders, code and files supporting remote BIOS updates (Wu, col. 3, lines 48-52), not adding a new initiation module. Moreover, Wu does not disclose the BIOS firmware having a plurality of initiation modules including recovery and non-recovery modules. Wu specifically teaches that the entire old system BIOS is replaced with the updated system BIOS image (Wu, col. 4, lines 30-33). This indicates that the old BIOS system cannot be added with a new initiation module.

Third, Christeson merely discloses verification of the flash memory area (Christeson, col. 3, lines 28-30, emphasis added), not automatically evaluating the initiation module. Verification of the flash memory area simply means comparing a file against a specified memory area. If there are differences, a verification error results (Christeson, col. 11, lines 54-65). An area is an address space that stores a device. Christeson teaches that verification of the flash memory area so that the area may be updated to include the normal system BIOS area, a user reserved area, a LAN BIOS area, a SCSI BIOS area, a video data area, or any other application specific processing logic in an area of flash memory (Christeson, col. 3, lines 28-35). Furthermore, verification does not mean "automatically evaluating". Christeson specifically teaches that when executing out of normal BIOS, the dynamic update program displays a menu of options for user selection" (Christeson, col. 3, lines 26-27). Requiring the user to select an option through a menu is not an automatic operation. Moreover, verification means "to prove the truth of", not evaluating. In contrast, evaluating is an act of determining if the initiation module is required for the recovery. (See, for example, specification, paragraph [0021]).

Fourth, Christeson merely discloses BIOS including both a normal BIOS in one memory block and recovery BIOS in another area (Christeson, col. 2, lines 48-54), not designating the new initiation module as a recovery initiation module if the new initiation module is required for the recovery. As discussed above, the division of the BIOS into the normal BIOS map and the recovery BIOS map is done before the update and without adding a new initiation module. Therefore, it cannot designate the new initiation module as a recovery initiation module. The entire recovery BIOS is not the same as a recovery initiation module. Even if assuming placing the update in the recovery BIOS is designating the update as recovery BIOS, this "designation" applies to the entire update, not to a recovery initiation module. A BIOS may

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

contain recovery modules and non-recovery modules. In addition, placing is merely an act of putting a device into an area, whereas designating is to give a name to, to specify, to label, to point to. Without a specific naming, a mere placing a device in an area cannot render the device to be characterized as a recovery initiation module. Furthermore, since the partitioning of the flash memory is fixed, there is no determination if an initiation is required for the recovery.

There is no motivation to combine Christeson and Wu because neither of them addresses the problem of dynamically designating initialization modules as recovery code. There is no teaching or suggestion that adding a new initiation module to a BIOS firmware is present. Christeson, read as a whole, does not suggest the desirability of using an extensible firmware architecture. For the above reasons, the rejection under 35 U.S.C. §103(a) is improperly made.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion, or motivation to combine the references. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" In re Beattie, 974 F.2d 1309, 1312 (Fed. Cir. 1992), 24 USPQ2d 1040; Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. Interconnect Planning Corp. v. Feil, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Furthermore, although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." In re Mills 916 F.2d at 682, 16 USPQ2d at 1432; In re Fritch, 972 F.2d 1260 (Fed. Cir. 1992), 23 USPQ2d 1780.

In the present invention, the cited references do not expressly or implicitly suggest any of the above elements. In addition, the Examiner failed to present a convincing line of reasoning as to why a combination of Christeson and Wu is an obvious application of dynamically designating initialization modules as recovery code.

Therefore, Applicants believe that independent claims 1, 10, and 19 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicants respectfully request the rejection under 35 U.S.C. §103(a) be withdrawn.

Appl. No. 09/943,904
Amdt. dated December 28, 2006
Reply to Office Action of October 19, 2006

RECEIVED
CENTRAL FAX CENTER
DEC 28 2006

Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: December 28, 2006

By


Thanh V. Nguyen

Reg. No. 42,054

Tel.: (714) 557-3800 (Pacific Coast)

12400 Wilshire Boulevard, Seventh Floor
Los Angeles, California 90025

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8A)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

FACSIMILE

☐ deposited with the United States Postal Service
as first class mail in an envelope addressed to:
Commissioner for Patents, PO Box 1450,
Alexandria, VA 22313-1450.

☒ transmitted by facsimile to the Patent and
Trademark Office.

Date: December 28, 2006

Tu Nguyen

December 28, 2006


Date